

COPY

AMENDMENTS TO THE CLAIMS

This Listing of the Claims replaces all prior versions and listings of the claims.

Listing of the Claims:

1-68. (Cancelled)

69. (Currently amended) A method of treating prostate cancer comprising:

providing a monoclonal antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to PSMA with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, ~~a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109~~, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-1216 wherein the antibody or antigen binding portion thereof is conjugated to a cytotoxic drug; and

administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

70. (Previously presented) The method according to claim 69, wherein the prostate cancer is metastatic prostate cancer.

71. (Previously presented) The method according to claim 70, wherein the metastatic prostate cancer involves a bone marrow or a lymph node metastasis.

72. (Previously presented) The method according to claim 69, wherein the administering is carried out parenterally.

73. (Previously presented) The method according to claim 69, wherein the administering is carried out intravenously.

74. (Previously presented) The method according to claim 69, wherein the administering is carried out by intracavitary instillation.

75. (Cancelled)

76. (Previously presented) The method according to claim 69, wherein the monoclonal antibody or antigen binding portion thereof is administered following a prostatectomy.

77. (Previously presented) The method according to claim 69, wherein the monoclonal antibody or antigen binding portion binds live cells.

78. (Cancelled)

79. (Previously presented) The method according to claim 69, wherein the monoclonal antibody is produced by a hybridoma with an ATCC accession number HB-12101.

80-123. (Cancelled)

124. (Currently amended) A method of treating prostate cancer comprising:  
providing a monoclonal antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to PSMA with a monoclonal antibody selected from the group consisting of an a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, ~~a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109~~, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126, wherein the antibody is labeled with the radiolabel <sup>90</sup>Y; and  
administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

125. (Currently amended) A method of treating prostate cancer comprising:

providing a monoclonal antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to PSMA with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, ~~a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109~~, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126, wherein the antibody is labeled with a radiolabel, and wherein the radiolabel is a beta- or gamma-emitter; and

administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

126. (Currently amended) A method of treating prostate cancer comprising:

providing a monoclonal antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to PSMA with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, ~~a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109~~, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126, wherein the antibody is bound to a cytotoxic drug of bacterial origin; and

administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.

127. (Currently amended) A method of treating prostate cancer comprising:  
providing a monoclonal antibody or antigen binding portion thereof which binds to prostate specific membrane antigen (PSMA) and competes for binding to PSMA with a monoclonal antibody selected from the group consisting of a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12101, ~~a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12109~~, a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12127, and a monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126, wherein the antibody is bound to a cytotoxic drug of plant origin; and  
administering the antibody or antigen binding portion thereof to a subject under conditions effective to treat prostate cancer.
128. (Cancelled)
129. (Previously presented) The method according to claim 69, wherein the monoclonal antibody or antigen binding portion thereof competes for binding to PSMA with the monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126.
- 130-136. (Cancelled)
137. (Previously presented) The method according to claim 69, 125, 126 or 127, wherein the monoclonal antibody or antigen binding portion thereof is internalized with the PSMA.
138. (Previously presented) The method according to claim 69, 125, 126 or 127, wherein the antigen binding portion is selected from the group consisting of a Fab fragment, a F(ab')<sub>2</sub> fragment, and a Fv fragment.
139. (Cancelled)

140. (Previously presented) The method according to claim 69, wherein the cytotoxic drug is selected from the group consisting of a therapeutic drug, a compound emitting radiation, a molecule of plant, fungal, or bacterial origin, a biological protein, and a mixture thereof.

141. (Previously presented) The method according to claim 140, wherein the cytotoxic drug is a compound emitting radiation.

142. (Previously presented) The method according to claim 141, wherein the compound emitting radiation is an alpha-emitter.

143. (Previously presented) The method according to claim 142, wherein the alpha-emitter is selected from the group consisting of  $^{212}\text{Bi}$ ,  $^{213}\text{Bi}$ , and  $^{211}\text{At}$ .

144. (Previously presented) The method according to claim 141, wherein the compound emitting radiation is a beta-emitter.

145. (Previously presented) The method according to claim 144, wherein the beta-emitter is  $^{186}\text{Re}$ .

146. (Previously presented) The method according to claim 144, wherein the beta-emitter is  $^{90}\text{Y}$ .

147. (Previously presented) The method according to claim 141, wherein the compound emitting radiation is a gamma-emitter.

148. (Previously presented) The method according to claim 147, wherein the gamma-emitter is  $^{131}\text{I}$ .

149. (Cancelled)

150. (Previously presented) The method according to claim 140, wherein the cytotoxic drug is a molecule of bacterial origin.

151. (Previously presented) The method according to claim 140, wherein the cytotoxic drug is a molecule of plant origin.

152. (Previously presented) The method according to claim 140, wherein the cytotoxic drug is a biological protein.

153. (Previously presented) The method according to claim 69, wherein the monoclonal antibody or antigen binding portion thereof further comprises a label.

154. (Previously presented) The method according to claim 153, wherein the label is selected from the group consisting of a biologically-active enzyme label, and a radiolabel.

155. (Previously presented) The method according to claim 154, wherein the label is a radiolabel selected from the group consisting of  $^{111}\text{In}$ ,  $^{99\text{m}}\text{Tc}$ ,  $^{32}\text{P}$ ,  $^{125}\text{I}$ ,  $^{131}\text{I}$ ,  $^{14}\text{C}$ ,  $^3\text{H}$  and  $^{188}\text{Rh}$ .

156-158. (Cancelled)

159. (Previously presented) The method according to claim 69, 125, 126 or 127, wherein the monoclonal antibody or antigen binding portion thereof is in a composition further comprising a pharmaceutically acceptable carrier, excipient, or stabilizer.

160. (Previously presented) The method according to claim 69, 125, 126 or 127 wherein the monoclonal antibody or antigen binding portion thereof is administered in conjunction with a second therapeutic modality.

161. (Previously presented) The method according to claim 160, wherein the second therapeutic modality is selected from the group consisting of surgery, radiation, chemotherapy, immunotherapy and hormone replacement.

162. (Previously presented) The method according to claim 161, wherein the hormone replacement comprises treatment with estrogen or an anti-androgen agent.

163. (Previously presented) The method according to claim 162, wherein the anti-androgen agent is an agent which blocks or inhibits the effects of testosterone.

164. (Previously presented) The method according to claim 126, wherein the prostate cancer is metastatic prostate cancer.

165. (Previously presented) The method according to claim 164, wherein the metastatic prostate cancer involves a bone marrow or a lymph node metastasis.

166. (Previously presented) The method according to claim 126, wherein the administering is carried out parenterally.

167. (Previously presented) The method according to claim 126, wherein the administering is carried out intravenously.

168. (Previously presented) The method according to claim 126, wherein the administering is carried out by intracavitary instillation.

169. (Cancelled)

170. (Previously presented) The method according to claim 126, wherein the monoclonal antibody or antigen binding portion thereof is administered following a prostatectomy.

171. (Previously presented) The method according to claim 126, wherein the monoclonal antibody or antigen binding portion binds live cells.

172. (Previously presented) The method according to claim 126, wherein the monoclonal antibody is produced by a hybridoma with an ATCC accession number HB-12101.

173-185. (Cancelled)

186. (Previously presented) The method according to claim 126, wherein the monoclonal antibody or antigen binding portion thereof competes for binding to PSMA with the monoclonal antibody produced by a hybridoma with an ATCC accession number HB-12126.

187 -189. (Cancelled)

190. (Previously presented) The method according to claim 69, 124, 125, 126, or 127, wherein the method of treating prostate cancer is a method that prevents the progression of prostate cancer or delays the progression of prostate cancer.

191. (Cancelled)

192. (Previously presented) The method according to claim 69, wherein the monoclonal antibody is produced by a hybridoma with an ATCC accession number HB-12127.

193. (Previously presented) The method according to claim 69, wherein the monoclonal antibody is produced by a hybridoma with an ATCC accession number HB-12126.

194. (Cancelled)

195. (Previously presented) The method according to claim 126, wherein the monoclonal antibody is produced by a hybridoma with an ATCC accession number HB-12127.



196. (Previously presented) The method according to claim 126, wherein the monoclonal antibody is produced by a hybridoma with an ATCC accession number HB-12126.